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Reducing New-Born Lamb Stress

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More than 80 percent of lamb death occurs in the first 2 to 3 days of age. Generally, starvation, hypothermia (lowered body core temperature), and scours account for these baby lamb losses.

It's essential for a newborn lamb to consume adequate colostrum -- 2 to 3 ounces per pound of body weight -- during its first 24 hours of life. Ewe colostrum is preferred, yet cow and goat colostrum can be substituted. Colostrum provides energy, protein, minerals, vitamins, water, and important antibody properties.

Antibodies establish defense against diseases the lamb could face early in life and are absorbed in the animal most effectively in the first hours of life. By 8 hours the uptake of these important properties is sharply lowered.

At birth, lamb body fat reserves provide a limited source of fuel to maintain body temperature. A healthy newborn can survive for many hours on body reserves. The rate at which the body reserves are used depends on the environmental temperatures. In cold temperatures the reserves are burned at a high rate, thus lamb suckling or intervention with a stomach tube must occur sooner. If colostrum intake does not occur, the lamb's body reserves are eventually depleted and that leads to hypothermia induced by starvation. Newborn lamb death loss caused by the starvation-hypothermia complex is usually avoidable with adequate colostrum intake.

Unthrifty (weak) lambs at birth need more intense care to avoid hypothermia. Unthrifty lambs includes those lacking the vigor to stand or attempt to suckle in the

first hours of life. The lack of vigor may indicate they have lower body energy reserves. Therefore, it's critical to intervene promptly. If these lambs lack the desire to suckle, stomach tubing is the only option for delivering colostrum into the animal. Even with adequate colostrum intake, lambs may require a heat source to maintain their body temperature.

A cold mouth is a sure sign that a lamb is experiencing hypothermia. **Return the lamb's body temperature to normal (102.5F), as evidenced by a warm mouth, before using a stomach tube to deliver colostrum. Without the warming step, the tubing procedure will lead to certain lamb death due to shock.**

Lambs receiving inadequate colostrum are at risk to experience *E. coli* scours beginning 12-24 hours after birth. First signs of the disease often appear approximately 12 hours after delivery and may include listlessness with no desire to suckle, followed by characteristic symptoms including wet tail and hindquarters. The fluid loss leads to severe dehydration and acidosis.

It's necessary that dehydrated lambs be treated with electrolytes. Consider products formulated specifically for lambs. Mortality is extremely high in lambs left untreated for dehydration since hypothermia will likely follow dehydration.

Consult a veterinarian to establish a hypothermia treatment and prevention protocol including antibiotic use. Offering ewe colostrum or milk replacer to a lamb showing symptoms of this disease will prove unsuccessful since the *E. coli* bugs thrive on milk-based products.

Lamb Care – Birth to 24 Hours

- Delivery:**
- Determine lamb vigor – indicators:
 - lamb suckling interest
 - ability to get up if inadequate colostrum, or off-color obtain other sources
 - Help suckle or administer colostrum with stomach tube
 - 6 oz > 8 lb lamb
 - 4 oz < 8 lb lamb
-

- 2-4 Hours:**
- Check mouth. If cold, it's hypothermic; must be warmed up.
 - Monitor lamb vigor
 - if hasn't suckled try to manually assist suckling
 - Administer 6 oz. or appropriate quantity of colostrum if suckling has not occurred successfully
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- 6-8 Hours:**
- Check gut fill, suckle lamb(s)
 - Important period, give additional colostrum as warranted by gut fill and vigor
-

- More than 8 Hours:**
- Monitor lamb vigor, hypothermia
 - Assume adequate colostrum if >1 oz colostrum/lb of lamb body weight
 - Use up to 6 oz of Blue Ribbon® electrolyte product at 4-6 hr intervals until lamb gains suckling interest
 - Check for wet tails after 12 hrs.
-

Rule of thumb: If lamb lacks interest to suckle, yet appears to require gut fill, use electrolyte product after 8 hours of life. This reduces the milk products for *E. coli* bacteria. An *E. coli* infection typically occurs between 12-24 hours after birth.

Field observations indicate that unthrifty lambs (weak) seem to be at risk for scours even when large quantities of colostrum have been administered in the first hours of life. The sheep industry currently lacks a commercial ovine vaccine to prevent the onset of this disease.

For those with an *E. coli* scour outbreak (lambs with wet tail, legs, and britch area), follow directions given for electrolyte usage, with Blue Ribbon-Lamb and Kid Electrolytes®.

The following recommendations give a structured guide to improve baby lamb survival by reducing starvation, hypothermia, and perhaps the incidence or severity of *E. coli* type scours. This protocol is especially useful for flocks with a history of *E. coli* outbreaks and/or unthrifty lambs:

- Administer appropriate electrolyte quantity, no milk products. Expect to deliver product four times a day.
- Monitor hypothermia and dehydration. Warm lambs when necessary.
- Leave lamb(s) with ewe during the outbreak as long as hypothermia is avoided. Lamb will demonstrate interest in suckling during recovery, not before.
- From time of outbreak, expect approximately 30 hours for lamb to gain interest in nursing.
- Don't expect to save them all.

Other helpful lamb management hints for flocks with a history of *E. coli* outbreaks:

- Record time of birth; use chalkboard or "white board."
- Push temperature to 35-40F in lambing barn.
- Maintain sanitary conditions to reduce cross contamination. Clean stomach tubes with hot water and soap. Wash hands with hot water and soap between pens; checking lamb temperature across pens without a thermometer offers risk. Use Nolvasen® or similar disinfectant for hands if water and soap is unavailable.
- DO NOT administer milk products via stomach tube after 8 hr of life.

For information about facility management as well as additional pre-lambing and lambing tips, see ExEx 2026 Lambing-Time Management.

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